# CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

# FOR DOMESTIC ENHANCED INDEX STRATEGY- INTERNALLY MANAGED

March 19, 2001

This Policy is effective immediately upon adoption and supersedes all previous domestic enhanced index strategy – internally managed investment policies.

## I. PURPOSE

This document sets forth the investment policy ("the Policy") for the Domestic Enhanced Index Strategy – Internally Managed ("the Strategy"). The design of this Policy ensures that investors, managers, consultants, or other participants selected by the California Public Employees' Retirement System ("the System") take prudent and careful action while managing the Strategy. Additionally, use of this Policy provides assurance that there is sufficient flexibility in controlling investment risks and capturing investment opportunities.

## II. STRATEGIC OBJECTIVE

Diversifying the domestic equity segment through a risk-controlled, value-added strategy with a low correlation of returns to the System's other active and passive investments is the strategic objective of the Strategy.

The Strategy shall be managed to accomplish the following:

- 1. Enhance the System's total return;
- 2. Hedge against active (pre-retirement) liabilities;
- 3. Provide diversification to the System's overall investment program; and
- 4. Consider solely the interests of the System's participants and their beneficiaries in accordance with California State Law.

## III. RESPONSIBILITIES AND DELEGATIONS

- A. The **System's Investment Committee** ("the Investment Committee") is responsible for approving and amending the Policy. The Investment Committee delegates the responsibility for administering the Strategy portion of the System through the Delegations of Authority (Delegation Nos. 89-13 and 95-50).
- B. The **System's Investment Staff** ("the Staff") duties include, but are not limited to, the following:
  - 1. Developing and recommending the Policy to the Investment Committee;
  - Maintaining a procedures manual, subject to periodic reviews and updates, outlining Staff operational procedures used in implementing this Policy;
  - Implementing and adhering to the Policy;
  - 4. Reporting all violations of the Policy immediately to the Investment Committee. The Staff's report shall include explanations and recommendations;
  - 5. Purchasing only those securities that are outlined in the Policy;
  - 6. Reporting internally to senior management concerning the implementation of this Policy. The Staff's report shall be prepared monthly and shall include, but not be limited to the following:
    - a. Current market value of the portfolio;
    - b. Performance of the portfolio versus the Benchmark as reported by the prime broker; and
    - c. Performance attribution analysis that attributes return to its causes.
  - 7. The Staff shall develop and maintain specific Watchlist Criteria detailing the qualitative and quantitative factors to evaluate managers.
- C. The **General Pension Consultant** ("General Pension Consultant") is responsible for monitoring and evaluating the portfolio's performance and

making reports concerning the performance to the Investment Committee. The General Pension Consultant shall report to the Investment Committee, at least quarterly, the performance relative to the Benchmark and Policy guidelines. The General Pension Consultant is responsible for reporting any non-compliance issues in accordance with its responsibilities under its contract with the System.

## IV. PERFORMANCE OBJECTIVE

Enhancing the return of a portion of the Internally Managed Domestic Equity Index Fund is the performance objective of the Strategy. The performance objective shall be accomplished by obtaining the highest active return at the specified target active risk level.

## V. INVESTMENT APPROACH AND PARAMETERS

## A. Investment Approach

To achieve the stated performance objective, the Strategy uses four components in the active equity investment process: Stock Selection, Risk Control, Transaction Cost Control, and Portfolio Construction. The four components are described as follows:

## Stock Selection

The Strategy uses a quantitative stock selection model to estimate the expected relative return of all stocks within the stock selection universe. The stock selection universe shall be the Wilshire 5000 Index. The stock selection strategy shall diversify across many different types of factors to avoid heavy reliance on any one source of returns should a factor underperform for an extended period. The expected factor returns in the stock selection strategy shall adapt over time with the realized factor returns.

## Risk Control

The initial target level of risk in the active portfolio shall be 50 basis points above the base level of active risk in the set of instruments used to mimic the Benchmark. The maximum target level of risk in the active portfolio shall be 300 basis points above the base level of active risk in the set of instruments used to mimic the Benchmark.

The level of exposure to common factors associated with undesirable risk in the active portfolio shall be minimized by applying an increasing penalty to such exposures. Holding a large number of stocks shall diversify the level of specific risk in the

active portfolio. Additionally, the percentage weight of any stock in the active portfolio shall be constrained to be less than  $\pm 2\%$  to further control the specific risk of individual stock positions.

## 3. Transaction Cost Control and Trading Activity

A model of the fixed and variable transaction costs shall be used to offset expected returns by the costs of trading. As a result of such action, the amount of portfolio turnover shall be determined within the optimization process. The forecast of trading cost for each stock shall be based on its bid/ask spread, historical volume and volatility, and the market center in which it is traded.

The Strategy shall use a variety of trading techniques and liquidity sources to obtain best execution of the trade list.

## 4. Portfolio Construction

At least monthly (or more often, as needed) an optimization process shall be performed. The optimization process shall ensure that valuable time-sensitive stock selection information is implemented in a timely manner and that the portfolio risk characteristics are adequately controlled. The System shall continually monitor and improve the estimates for expected returns, risks, and transaction costs in order to maximize the actual value added to the Strategy from the active investment process.

#### B. Restrictions

- 1. Foreign incorporated securities (including ADRs) shall not be held in the portfolio for investment. Such securities received in corporate actions or through a change in classification shall be liquidated as is feasible.
- 2. The Strategy is prohibited from transacting in shares of Real Estate Investment Trusts (REITs).
- 3. To ensure the liquidity of the active portfolio holdings, the active portfolio holdings shall be limited to 200% of the stock's one-month average daily trading volume. Daily trading in any stock is limited to no more than 35% of its one-month average daily trading volume.
- 4. The Fund is prohibited from transacting in shares of tobacco stocks.

## C. Permissible Securities

Equity securities of publicly traded companies headquartered in the U.S.

## D. Corporate Actions

Corporate actions (e.g., tender offers, mergers, Dutch-auctions, and spinoffs) shall be handled on a case-by-case basis, referring issues that require in-depth analysis to the Research Unit.

# E. Attribution Analyses

The portfolio's cash, liquidity, active performance, and risk characteristics shall be monitored and reported through the attribution reports described below in–numbers one through three. The reports shall determine any necessary rebalancing of the actual portfolio or additional model research due to issues highlighted in these reports.

# 1. Performance Attribution Report

A performance attribution report shall be generated at least monthly decomposing active performance into that due to common factors, including industries, and that due to stock-specific sources.

# 2. Forecasted Risk Attribution Report

A risk-attribution report shall be generated at least monthly decomposing the forecasted active risk into that due to common factors, including industries, and that due to stock-specific sources.

# 3. Cash Position Report

A cash report shall be generated at least monthly displaying the account equity, long, short, and net cash balances, and the leverage ratio.

## 4. Liquidity Report

A liquidity report shall be generated at least monthly displaying the percentage of total market capitalization of each stock held. The report shall also display the percentage of one-month average daily trading volume, on a total and active basis, and on a portfolio and individual name basis.

## VI. BENCHMARK

The benchmark for the Strategy shall be the CalPERS Custom Wilshire 2500 Index ("the Benchmark") excluding REITs and tobacco stocks (with dividends reinvested). This Benchmark is a customized capitalization-weighted portfolio constructed and shall be maintained by Wilshire Associates. The Benchmark's composition is designed to provide broad market exposure to the total U.S. equity market while minimizing transaction costs. The Index is composed of the top 2500 securities of the Wilshire 5000 Index. The Index is based on market capitalization, and is reconstituted annually. The Wilshire 5000 Index measures the performance of all U.S. headquartered equity securities with readily available price data.

## VII. GENERAL

- A. This Policy contains a Glossary of Terms in Section IX of this document.
- B. Investors, managers, consultants, or other participants selected by the System shall make all calculations and computations on a market value basis as recorded by the System's custodian.

## VIII. DERIVATIVES AND LEVERAGE POLICY

## A. Strategies

Leverage shall be used in the form of borrowed securities. In cases where the Benchmark portfolio does not contain a large enough percentage of the stock to facilitate the desired percentage of underweighting relative to the Benchmark, borrowing the securities from a broker and selling them short shall facilitate the additional desired underweighting. The proceeds from the sale of these borrowed securities shall be used to finance the offsetting overweighting of other stocks relative to the Benchmark; consequently, the Strategy remains fully invested.

Financial futures, options, and swaps may be utilized in the portfolio, in accordance with the System's Derivatives Policy, as it may be amended, for the following purposes:

- 1. To permit the investment of dividends received.
- 2. To equitize cash and dividends receivable.
- 3. To allow adjustment of the portfolio's risk characteristics in the most cost effective and efficient manner available.
- 4. To facilitate investment of cash flows related to contributions, withdrawals, or asset allocation compliance.

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## B. Justification

# 1. Leverage

Necessary to achieve underweights of stocks in the portfolio through short-selling of securities, in accordance with the strategic objective of obtaining the highest active return at the specified target active risk level.

#### Derivatives

- a. Allow the establishment of a cash buffer.
- b. Used to lower transaction costs compared with the purchase of underlying securities.
- c. High correlation to returns of the Benchmark Index.
- d. Provide the ability to alter risk characteristics versus the Benchmark without disrupting the underlying portfolio or unnecessarily increasing turnover.

#### C. Restrictions

- Uncovered call writing is prohibited.
- Traders are limited in their authorization to trade stock index futures to 1000 long contracts and 1000 short contracts, without prior written authorization from management.

#### D. Permissible Derivatives

Exchange-traded and over-the-counter derivatives shall be utilized in the index portfolio. These may include, but are not limited to the following:

- Equity Swaps
- Index Futures
- 3. Style Futures
- 4. Index Options
- E. Futures Commission Merchants (FCM)

FCMs are selected based on a broad range of criteria, which includes the following factors:

- Low cost clearing and executing charges;
- 2. Securely capitalized firm;
- 3. Clear account statements and efficient reconciliations;
- 4. Responsive personnel;
- 5. Discrete and efficient operation;
- 6. Personal interview; and
- Reference checks.

## IX. GLOSSARY OF TERMS

The following Glossary of Terms contains definitions also referenced in the System's Master Glossary of Terms.

**Active Investment Process** – The process of managing a portfolio with the objective of outperforming a specified benchmark.

**Active Portfolio** – The zero-investment portfolio that is overlaid on the benchmark portfolio in the attempt to add value above the performance of the benchmark portfolio. All active strategies can be decomposed into a benchmark portfolio, which may simply be the risk free rate, and a zero-investment active portfolio.

**Active Return** – The return to the active portfolio; the return to an invested portfolio in excess of that to its specified benchmark.

**Active Risk** – The time-series standard deviation of the returns to the active portfolio; the risk of the returns to a fully invested portfolio in excess of those to its specified benchmark.

**Cash Buffer** – An amount of the portfolio funds invested in cash equivalent securities, used for varying purposes, such as to avoid the incursion of a debit balance.

**Common Factor** – An element of return that influences all or some significant subset of stocks. According to multiple-factor models, the common factors determine correlations between asset returns. Characteristics measuring exposure to common factors include industry membership, fundamental

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characteristics such as Price-to-earnings ratio, sensitivities to macroeconomic effects such as the broad market or currency movements, or market based such as recent returns.

**Common Factor Return** – The portfolio return attributable to a particular common factor. Asset returns are decomposed into a common factor component, based on the asset's exposures to common factors times the factor returns, and the specific return.

**Common Factor Risk** – The portfolio risk attributable to the effects of common factors.

**Equity Swap** – A contractual agreement to exchange the cash flow from the return of a designated equity index, such as the S&P500, for the cash flow from the return of a short-term interest rate, such as 30-day Libor.

Excess Return – The return of an asset relative to the risk-free return.

Factor Return - See Common Factor Return.

**Futures Contract** – A standardized contract for a deliverable commodity or instrument that conveys the obligation to make or take delivery of that commodity or instrument at a future point in time at a specified price.

**Leverage** – The use of borrowed funds, securities, or other financial contracts to increase economic exposure as measured by the leverage ratio.

**Optimization** – A means of selecting the best alternative to satisfy a measurable objective. In portfolio management, a means of selecting the portfolio to maximize investor utility. Investor utility is modeled using a mathematical function incorporating the expected returns, expected variances and covariances, and expected trading costs for all stocks. The optimization process adjusts the amounts invested in each stock until the incremental expected return from each stock is exactly offset by penalties for its incremental expected trading cost and incremental expected risk in the portfolio, subject to any constraints on positions.

**Option** – An instrument that conveys the right, but not the obligation to buy or sell a deliverable instrument at a specified price.

**Return Factor** – A common factor to which sensitivity within the active portfolio is desired due to its returns being statistically significant or reliably forecastable over time.

**Risk Factor** – A common factor to which sensitivity is not desired within the active portfolio due to its returns being too volatile or unpredictable over time.

**Short Sale** – The sale of a security that is not owned by the investor but rather is borrowed from a broker. The investor eventually repays the broker in kind by purchasing the security in a subsequent transaction.

**Specific Return** – The part of excess return not attributable to common factors. It is independent of the common factors and the specific returns of other assets.

**Specific Risk** – The risk of the specific return.

**Standard Deviation** – A measure of the dispersion of possible outcomes around the expected value of a random variable. For a normally distributed random variable, there is approximately a 1-in-6 chance of an occurrence one or more standard deviations from the expected value, a 1-in-44 chance of an occurrence two or more standard deviations from the expected value, and a 1-in-741 chance of an occurrence three or more standard deviations from the expected value.